

## An analysis of the pre-incubation process: a case study

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### Abstract

*Innovation habitats have fostered entrepreneurship and assisted in the creation and development of innovative ventures. Among the existing innovation habitats, the pre-incubator has contributed to the creation of a successful business model. Thus, the current study aims to analyze the perception of the pre-incubated on the importance of pre-incubation in the development of their business. A case study was conducted through personal interviews with participants from the pre-incubator in Florianópolis. As a main result, it verified that the pre-incubator contributed to the development of the business model of its pre-incubated. In addition, it served as a learning environment on entrepreneurship and the business world. However, negative points also raised, such as management changes in the middle of the pre-incubation process. Finally, it noted that the environment positively evaluated by the informants, mainly as a place of knowledge sharing and development of their business models.*

**Keywords:** Pre-incubator; Pre-incubated; Innovation habitats; Business models.

### 1. Introduction

Innovation habitats have contributed and fostered innovation by supporting the development of new firms (TEIXEIRA, 2018). Thus, the crescent pursuit for innovation and relationship between the various actors in the global economy demands innovative habitats (ZOUAIN, 2003). Among the variety of innovation habitats, pre-incubation acts in order to undertake and transform business ideas (FERREIRA; TEIXEIRA, 2017; MARTÍNEZ; CRESPO, 2017).

Therefore, the pre-incubator offers support for entrepreneurs at an early stage in order to develop business models (VOISEY; JONES; THOMAS, 2013; FERREIRA; TEIXEIRA, 2017). Furthermore, assists the pre-incubated to develop its idea and turn it into profitable and scalable businesses (Teixeira, 2018). The incubation process, for example, was used worldwide by about 7,000 incubators in 2011

(VOISEY; JONES, THOMAS, 2013). Such environments become even more important since the small and medium enterprises (SMEs) are considered engines of economic growth (WILSON, 2008).

In this context, the coastal city of Florianópolis in the Brazilian state of Santa Catarina is an entrepreneurial city. Consequently, Florianópolis was considered the second best city to being an entrepreneur, the third in capital access, the third in innovation and the first in human capital of Brazil (EXAMINATION, 2018). This is mainly due to the high concentration of innovation habitats in the city, as coworkings, makerspaces, incubators, accelerators, innovation centers and technology parks (TEIXEIRA; PIRES JUNIOR; MATOS, 2019). Among these, there is a pre-incubator, which provides support to new entrepreneurs in reason to develop their ideas focused on creative economy (COCREATION LAB, 2019).

The pre-incubator are a relatively new habitat. In this reason, there is a lack of available literature exploring its impact (VOISEY; JONES; THOMAS, 2013). Pallotta and Campisi (2018) carried out studies extracted in the Scopus database regarding pre-incubation. These authors investigated the key success factors of the pre-incubation in Starmac pre-incubator of Switzerland and Martinez; Fernández-Laviada and Crespo (2017) who applied a questionnaire with 167 pre-incubated and evaluated the perception of quantitatively entrepreneurs.

However, due to limited literature we did not find any study that analyzed qualitative way the perception of entrepreneurs about the pre-incubation process. Therefore, this research aims to cover this gap of knowledge and contribute to scientific research in the area. Furthermore, the objective of the research is to analyze the pre-incubation process through the perception of the pre-incubated. The paper is structured with this introduction, followed in section 2 by a brief theoretical framework; Section 3 presents the research method; section 4 the results are shown and, finally, in Section 5 describes the final considerations.

## **2. Theoretical Framework**

### **2.1 Pre-incubator**

There are three main phases to support the creation of a business: pre-incubation; incubation and acceleration. Pre-incubation refers to the generation of ideas; conceptualization, definition and validation of business models and initial business plan (PALLOTTA; CAMPISI, 2018). Thus, pre-incubators are defined as a "business ideas where risk reduction setting can be tested with a view to market viability before progressing to business incubation" (DICKSON, 2004, p. 533).

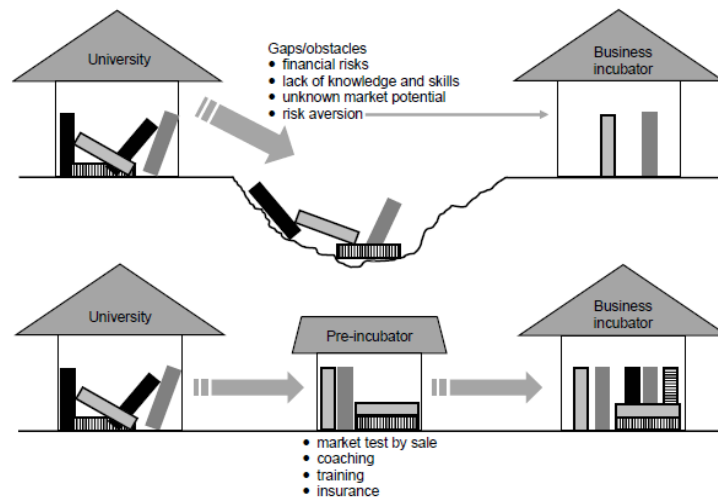
At this stage, as pointed out by Voisey, Jones and Thomas (2013), pre-incubation is intended to fill the gaps between higher education institutions and business incubators. Thus, provide tools to manage the risks associated with early-stage ventures. This support is offered to pre-incubated through training and infrastructure. Accordingly, Ferreira and Teixeira (2017) specify that the pre-incubator offers tools entrepreneurs, advisory services, mentoring, advisory services, courses, institutional support to new businesses, networking and approach to financial and investment entities, also analyzing their technical and marketing viability.

As identified by Voisey, Jones and Thomas (2013), the gap illustrated in Figure 1 presents real barriers to creation of a new enterprise, such as lack of capital; knowledge and limited skills (including personal skills); insufficient market research; lower management skills (including financial management); and

ignorance of the value of intellectual property (USINE, 2002). The pre-incubator operates specifically to solve these problems.

To be pre-incubated, the business model is developed with the business planning through the study of technical and economic feasibility, development of the business model, business plan, patent and trademark consultancy, in addition to strategic and marketing plans (NDONZUAU; PIRNAY; SURLEMONT, 2002).

Figure 1: Valley of Death between university and business incubator



Source: (USINE, 2002).

The validated business model is important, according to Alvarado (2012), because it is one of the essential factors for a development project of any company. Still, according to SEBRAE (2018), the business model is the best tool to draw an accurate picture of the market, product and entrepreneurial attitudes. The pre-incubator, in this sense, is the first environment in which the entrepreneur can expose and develop their ideas with the necessary initial support (BIRTH; LABIAK JUNIOR, 2011). Like this, as mentioned by Brunet (2003), the pre-incubator must work with its team to gradually promoting factors essential to the development, which in the author's view are technological and entrepreneurial profiles.

To ensure that during the pre-incubation process the entrepreneur can interact with the tools, the time devoted to pre-incubation is 6 months and may be extended up to one year. This term is generally defined in the pre-incubation notice. During this period, the entrepreneur is encouraged to develop in depth the potential of your business to effectively start the project (NINTEC, 2012).

### 3. Methodology

#### 3.1 Search Type

This research is a case study that uses a qualitative and exploratory approach. The qualitative survey comprising a set of interpretive techniques to decode and describe the components of a complex system of meanings (LAKATOS, 2010). Barr (2004), notes that research where there is substantial depth, longitudinal stress or prospects of the people involved are important and should receive a qualitative approach. Qualitative methods are most appropriate when there are questions about description, interpretation and

explanation, and for the most part, are from the perspective of the study participants (BARR, 2004).

As for the goal, the research fits as exploratory. Such approach used in order to provide more information on the investigated subject, enabling its definition and its design. Assumes, in general, bibliographic forms of research and case studies. Thus, it involves: a) literature review; b) interviews with people who have had practical experience with the researched problem; and c) analysis examples that stimulate understanding (PRODANOV; FREITAS, 2013). Finally, as semi-structured interviews were conducted, qualitative and exploratory approach was the most appropriate for the purposes of research.

### **3.2 Data Collection**

Data collection was conducted through semi-structured interviews with seven former members of the pre-incubator of Florianópolis. The interviews were about how the pre-incubated analyzed the pre-incubation process, from the selection process to the submission of the final pitch. The choice of pre-incubator analyzed was because it is the only one in the city. This data was lifted from the mapping performed by the research group “VIA Estação Conhecimento” from the Federal University of Santa Catarina (UFSC) (VIA ESTAÇÃO CONHECIMENTO, 2019).

Gil (2008) mentions that the interview is a technique where the researcher is facing questions to the informant for the data of interest to the investigation. A party seeking to collect the data and the other is presented as a source of information. The interview is a primary data collection technique, where there is great importance in the verbal description of the informants (PRODANOV; FREITAS, 2013).

For data analysis, we used the qualitative approach. It treats this process as a sequence of activities, which involves data reduction, categorization, interpretation and the final redaction of the work (PRODANOV; FREITAS, 2013). To maintain the confidentiality of respondents, their names are not disclosed. Thus, they are identified as informants.

### **3.3 Case Study**

According to Prodanov and Freitas (2013), the case study consists in collect and analyze information on a particular individual, family, group or community, in order to study various aspects of the life, according to the subject of research. It is a type of qualitative and/or quantitative research, which has a deep study as the object.

The case study that served as the source of primary data for this research was conducted in the pre-incubator. The pre-incubator is for people who have ideas in the creative economy areas with the potential to generate new business. From notice are selected projects in the areas of technology, design, arts, tourism and gastronomy. Over six months, the cocreators undergo a process of pre-incubation through a set of activities and institutional support to assist in the business model validation stages (CENTRO SAPIENS, 2017).

Until the realization of this research, there are 66 partners and 35 pre-incubated ideas. There is 28 mentors on the network as well. The offered advantages, in addition to the provision of physical space to work are: i) corporate guidelines; ii) series of lectures and business-focused workshops; iii) mentoring; iv) conversation circle; v) events to foster innovation ecosystems; vi) mentoring; vii) continued support of the pre-incubator staff; viii) cocreation; ix) inspiring and collaborative environment; x) knowledge; xi)

multidisciplinary learning stream; xii) network; xiii) meetings and opportunities to the partner network (SAPIENS CENTER, 2017).

Thus, section 4 presents the perception of pre-incubated on the pre-incubation process. The approached topics were: motivation to participate in the pre-incubator and the selection process; the importance of staff in the development of the project; mentoring the process; collaboration and networking; the development of the business model; perceived positives, and; negative and possible improvement points.

## **4. Results and Discussion**

### ***4.1 Motivation to participate in the pre-incubator and the selection process***

By analyzing the interviews, it was possible to verify the entrepreneurs motivation to enter the pre-incubation process. The reasons were diverse, however, the most frequent was the search for knowledge regarding entrepreneurship. Therefore, they are in accordance Voisey, Jones and Thomas (2013), Tan and Ferreira (2017) who highlighted the issue of entrepreneurial formation as one of the main items provided by pre-incubator. The informant 1, for example, pointed out that had enough development of technical part, but lacked knowledge concerning the management area. In turn, the informant 4 revealed that this is a "good opportunity to learn", since him/her did not have business knowledge.

The pre-incubator was also seen as a place to discuss and study about the business idea, since "on the internet you cannot catch everything" (Informant 6), as well as to do network and structure the company (Informant 5). It also served to continue the projects that were stagnant (Informant 2).

As demonstrated in the theoretical framework, pre-incubation is an innovation habitat, which is, has the purpose to get an idea in order to turn it into a business model (Voisey; Jones and Thomas, 2013). However, five informants entered the pre-incubator with a prototype or something close that was already developed, while only two just submitted the idea.

There were seven respondents. Two had prototype of your business, one had a pre-prototype and a developed software. The informant 7, for example, has been developing his project for a year and a half. However, to participate in the pre-incubation process, give up on this project since was realized that it was unworkable and started working on a new idea. Furthermore, the informants 4 and 6 entered only with a business idea. Even for those who already have something developed, it was emphasized that the pre-incubator was crucial in organizing the business management part.

The informant 1, for example, took his/her master's thesis in mechanical engineering from the Federal University of Santa Catarina to be developed as a business pre-incubator of this case study. Pallotta and Campisi (2018) show that this situation is common in Starmarc pre-incubator in Switzerland. Thus, in most cases, the projects are brought by engineering students or researchers who developed the technology, but do not consider business development elements, that is, the steps for developing a business (PALLOTTA; CAMPISI 2018). This is what happened to the informant 1, who had technical skills and the product under development, but had no knowledge of entrepreneurship and management. In general, all informants admitted to not have knowledge about management tools.

The selection process to enter the pre-incubator occurs through a public call notice. To participate is necessary to make subscription using an online form between the current periods. It is necessary to fill the

following topics with a limited number of 1000 characters: Presentation; Justification; Objectives; Market potential; Target Audience; Innovative character; Pitch (3 minutes); Curriculum of the team; Work Schedule (minimum 20 hours per week). Thus, they were selected 10 ideas per class (LAB COCREATION, 2019). In relation to this process, all the 7 informants were unanimous in saying that it was easy and simple to participate. For example, the informant 4 revealed that he/she did more than the was required in the notice, "I think we get so much excited, we did more than necessary". Therefore, the participation factor in the selection process was not an impediment to submitting the project. In fact, Martinez Fernandez-Crespo and Laviada (2017) shows that the pre-incubator positively influences the risk-taking motivation of the person. Moreover, it is observed that the risk perceived by incubated individuals have a positive influence on entrepreneurial intentions and on the attributed convenience to these actions.

In the GTI pre-incubator in Wales, for example, to be selected in the notice, there is no need for a long-term business plan, readiness for investment or an existing customer base. Support is offered to the individual in order to create the business through market research, planning, improvement, training, guidance, negotiation test and then, go to the next step (VOISEY; JONES, THOMAS, 2013).

In the Starmarc pre-incubation, there are four entrepreneurial entry points for pre incubation program: First, just idea; Second, a business concept; third a business validation; and fourth, startup ingrate. Thus, the phase of the idea enter proposals without any strong concern with the technical or economic viability. Therefore, the concept of business is the first step of the validation of the idea, which the founders are engaged in customer discovery. In the business validation, the founders who were able to identify a market opportunity can begin to validate your assumptions. Finally, in startup ingrate, engages coaching and financial support (PALLOTTA; CAMPISI, 2018).

#### ***4.2 The importance of staff in project development***

Among the interviewed informants, only two developed their project individually. The others had at least one partner in the business. During the interviews, it was realized that this was a frequent debated issue, both good and bad sides.

Despite the six informants have entered the pre-incubator with one or more partners, only three of them kept the partnership. Some reasons for this: lack of alignment and commitment; withdrawal after the discard of the initial idea; lack of time and resources; lack of business vision; personal and financial problems. The following statements illustrate these situations.

*"I was in a rhythm there, pre-incubated and my partner was still in the past" (Informant 1). "Then came another idea we had, then I was alone" (Informant 3).*

*"My partner could not see how our product could reach a recurrence model" (Informant 7).*

In addition, the informant 7 listed other reasons to end the partnership: personal and financial problems with the partner. In fact, Voisey, Jones and Thomas (2013) state that not all problems encountered are related to business. Therefore, they points out that unforeseen circumstances may occur such as bereavement, divorce, accidents and prolonged illness, which can interrupt the process.

In turn, informants 4, 5 and 6 cited no problems with partners. Thus, it became clear that the level of

mutual interest in participating in the process was essential to maintain the partnership. As illustrated by the informant 4 when he mentions that despite the distance, your partner could participate actively in the pre-incubation process. It notes that the individual pre-incubated had volunteers help and, now of the project; he needs a partner to continue its business.

In fact, it is needed to have people helping in the design, as illustrated in the following statement: "If I did not have two other people helping me today... it would be hard. They are not my partners, but they are helping me every day"(Informant 3).

Therefore, a partner can bring advantages, once that he/her is engaged and aligned with the development of the enterprise. It is not possible to say with assertiveness that the partner is crucial to the failure of the project, however, two informants who close the company did not continue the development of the business.

### **4.3 The process of mentoring**

Mentoring was another recurring theme throughout the interviews. In general, there were those who approved and disapproved of their respective mentors. Those who disapproved mentioned that the mentor arrived too late or did not understand the project that was being developed. The statements illustrate their observations.

"It was a makeshift thing, we just had a conversation with him, so I can't say I enjoyed it" (Informant 4). This can be understood as a pre-incubator failure, which according to the interviewee's perception, took a long time to provide mentoring.

"I think most mentors today are much better prepared for the software area and not for the hardware area which is a very different technology, it's a different market, so some things on canvas are not easily applicable, you have to have a good job on top. "

In addition, he continued citing that mentoring contributed to his project not going ahead, since the mentor did not consider the project viable.

"The mentor he commented right, no more this here will not work because your investment level will be very high, you will not get an angel investor [...]" (Informant 7).

Informant 6 had the same difficulty as informant 7, however, he changed mentoring and his project evolved from then on, so much so that the second mentor wanted to become a partner in the project. Thus, informants 2 and 6 highly praised their mentors. For example, mentoring has helped perform "administrative" and management tasks, as well as prospecting clients for the business, according to their perceptions.

"After the mentor arrived, he helped me organize and helped me build, that I was doing the tasks and he was helping me." (Informant 2).

Therefore, it can be understood that mentoring is a fundamental support for the pre-incubated. However, the mentor must be aligned and know the market or technology of the mentor. Another limiting factor was the late arrival of some mentors. As highlighted by Martinez, Fernández-Laviada and Crespo (2017), mentoring is a key pre-incubator item.

#### **4.4 Collaboration and networking in the pre-incubator**

Networking is one of the most cited elements about the benefits of being in a pre-incubation process (PALLOTA; CAMPISI, 2018). In this pre-incubator is no different. In a general assessment, informants reported that the pre-incubator environment was very good and that colleagues were cool. However, some missed greater collaboration and co-creation between teams.

Thus, one informant mentioned that there was a delay for pre-incubates, according to his words, to “break the ice”, and this influenced a longer delay to exchange ideas about the projects. In addition, he added, people had a fear, an insecurity of sharing their ideas. In fact, the whole idea of pre-incubation collaboration was not happening, according to informant 4. So people would go to work, as in a coworking, and from time to time there would be lectures that, despite helping a lot, did not express the idea collaborative work of the pre-incubator, commented the informant 4. Thus, some lines emerged as:

“There were people who only discovered what I was doing there midway through the process, people were developing their own things” (Informant 1).

“I wish I had enjoyed this collaboration between the teams a little more. What is disclosed is that the pre-incubator is a co-breeding space ”(Informant 4).

“More than 90% of the time each one is concerned about their project, but every so often we exchange an idea, but what I miss is this stimulus“ let's do a project together ”(Informant 4).

As a solution, informant 1 suggested that there should be a moment in the week for everyone to share his ideas. Another informant revealed that the interaction happened at breakfast time, because people came, sat, and worked on their business. However, you have a different view, and do not think that is bad, by quoting that people are going to work on your ideas and you cannot get in the way. Unlike informant 1, informant 5 mentioned that there was no one afraid to give their ideas.

“This issue of people wanting to hide was all very open and shared, because everyone talked, they didn't have that problem” (Informant 5)

Therefore, in the perception of other informants, the pre-incubator was an excellent space for collaboration. Informant 5 cites the friendship between the participants in his class and states that the friends he has today come from the pre-incubator. As informant 2 reveals, citing that "everyone helped each other." Therefore, there was a close relationship of telling ideas and problems. This is clear in his/her speech.

“In a way it was a family, we play, it was a family that grew up, [...] you knew you came here to meet nice people” (Informant 2).

Finally, infrastructure was seen as critical to networking, where there were several tables that allowed people to talk about their ideas. For example, informant 7 mentioned that the pre-incubator provided greater contact with others. Finally, it ratified that the relationship with the cocreators and the pre-incubator team was the highest point of pre-incubation.

“This exchange is very interesting, seeing some need in the other and being able to help, even if it is not with your own product, forming a network that solves the problem” (Informant 7).

Therefore, there was no unanimity about the collaboration and networking process in the pre-incubation process. It is noted that the perception was recorded and that this may vary according to the person, and with the degree of expectation about the level of networking that each one had.



#### 4.5 The development of the business model

Since the main objective of the pre-incubator is to develop a business model, this is a central research issue. The pre-incubator should provide a safe environment in which participants can overcome their fears and develop their business ideas by testing them in the marketplace (PALLOTA; CAMPISI, 2018).

In the study by Pallota and Campisi (2018), for example, the authors reveal that business model validation is critical to the STarmac pre-incubator approach as it encourages founders and their team to focus on market demand.

In the pre-incubator, all respondents reported that the preincubator contributed to the development of their business model. Therefore, the pre-incubator can be considered to have achieved its main purpose. Of course, the degree of success varied as each pre-incubated progressed.

Most informants never had contact or had little business model knowledge. Therefore, the preincubator was fundamental in this process.

“I would not have the mindset of how this would work as a business [...] the pre-incubator favored my business model, of my project yes” (Informant 2).

Thus, informant 1 reported that the methodology used in the pre-incubator helped to understand its business model. Therefore, the cocreator was provoked to test things, talk to clients, get feedback on the idea, develop the empathy map, and then put together his value proposition. This, according to the same reports, is not possible in the academic environment in which it is part. Therefore, the success in the execution of the activities depends on the pre-incubated engagement.

Here is a good example of what recommended is not to do. Prior to entering the pre incubator, a cocreator developed his business for a year and a half, starting with the prototype. That is, made the opposite way to the indicated. Here again, the importance of the pre-incubator is highlighted as a way of guiding participants in the correct process for the development of the idea. As her speech illustrates.

“The cool thing is that I did it totally wrong, because I was not aware, I was not validating this idea before making the prototype, that is, it is usually the mistake that most make right, but this after I passed here, we started validating the idea [...] I made the prototype. Then, I made the canvas thinking about the prototype, I did everything backwards, I had no idea, and then validate, which is that I didn't even know what it was, so I learned first make the canvas, then have to validate and then make the prototype ”(Informant 3).

Two other pre incubated mentioned that the pre incubator served to validate the idea (Informant 4, Informant 5), but it was not possible to validate the prototype during the six months. The reason for the first was the rapid change of the market and therefore there was no time to finalize it. However, pre-incubation favored your business model, for example by changing the initial target audience (Informant 4). For informant 5, the pre-incubator provided the basis for further business development. According to the interviewee, if he had not gone through the pre-incubation process his project would not have achieved the current result.

The pre-incubator also made it possible to find the purpose of the companies. As reported.

“After so much coming back and making mistakes, trying, giving up, going on, because we have a purpose, everything can change, but the ongoing purpose for the world and you start analyzing the market as it comes from within you, from your DNA” (Informant 6).

“The canvas is cool but the value proposition and knowing who you are going to sell to is the most important” (Informant 3).

Finally, best of all for informant 7 was the necessary adequacy that the model underwent to fit the hardware industry.

“I see that a lot of the business model stuff I could have learned before and I would know how to get around that.”

This result is similar to that found in pre-incubators in Switzerland, where market validation emerges as the most important skill to learn. Other skills such as networking, flexibility, adaptation, interaction with others, and pitch were mentioned (PALLOTA; CAMPISI, 2018), as seen in the pre incubator.

About the tools used during the pre-incubation process, four informants reported no prior contact, and only one cocreator had used any of the tools. Therefore, it is evident that pre-incubation provided participants with knowledge and science on how to use management tools. As illustrated.

We had no idea about it, we discovered everything here, nor the terms and words we didn't know what it was”(Informant 4).

“We had all that value proposition instruction, empathy map, DNA, business mapping, benchmarking, SWOT analysis, we all did it” (Informant 7).

“It was very interesting to see this progression he made there from the empathy map to a value proposition, to the business model canvas, because it's something I had never thought of, and I just understand better how it works” (Informant 1).

Therefore, everyone mentioned that the tools were adequate. However, some businesses failed to reach the final stage of the pre-incubation process by the end of six months. In fact, as mentioned above, there are several elements involved in building an innovative business. The causes were mainly related to problems with the partner (informant 1 and informant 7), difficulty finding ways to monetize (informant 2), and time to develop the Minimum Viable Product (MVP) (informant 3), or inadequate mentoring (informant). 7).

Meanwhile, informant 4 is with the company in operation, but the financial return is still deficient. Informant 5 pointed out that he is looking for more clients, and that he uses the tools of the pre-incubator in what he identified as a learning cycle. Finally, informant 6 revealed that it is starting its first sales and closing its first deals.

In short, after the pre incubation process, two gave up on the business model. While 4 others are developing or have already developed and currently market their products. Finally, a cocreator is testing his MVP.

#### **4.6 Positive points**

All informants unanimously cited participation in the pre-incubator as a great learning experience. Positive points related to this experience were: i) possibility of connection with the innovation ecosystem; ii) more viable alternative than incubation; iii) environment of interaction and connection; iv) qualified pre-incubator team; and v) physical and intellectual support provided by the pre-incubator to develop the business model. As illustrated by informant 1, one of the biggest benefits he perceived was being a knot in Florianopolis' extensive innovation network, as well as the connection between academia and the market.

Thus, the pre-incubator allowed opening many doors, indirectly providing resources from partnerships that made by cocreators.

“Having contact with the innovation ecosystem, knowing the events, all the immersion in the experience of entrepreneurship, where pre-incubation was a huge gateway [...], we have a pre-incubator that is from people who are from but which is aimed at the market”(Informant 1).

“Due to the partnerships developed throughout the process, I was able to create the brand and logo for free, in addition to other services that outside the pre-incubator the company would have spent between 20 and 30 thousand reais” (Informant 6).

Similarly, Pallota and Campisi (2018) reveal that STarmac provides connection to the local ecosystem as well as exposure to potential investors. Thus, Voisey, Jones and Thomas (2013) cite that networking is one of the elements provided in the pre-incubation process.

According to informant 2, his experience was very positive in all aspects, especially in the business and administrative model, which he considers “boring”. In turn, the pre-incubator also helped in the professionalization of the business. “Pre-incubation helped us organize our advertising, our networking, the times were good, it was night time, it could fit in a certain way” (Informant 5).

In addition, the learning from the lectures, the contact with the speakers and the quality of the pre-incubator team were points cited by the cocreators. “The environment was very massive, the people who were there were very nice [...], it was very good, learning a lot, to continue, and more people to benefit from this whole process” (Informant 5).

The pre-incubator was also seen as an alternative to the incubator, as well as being free, “you need to have National Register of Legal Entities and you are already selling your product, and I didn't have it (to enter the incubator)” (Informant 3).

Therefore, support in the development of the business model, visibility, connection between cocreators, market, mentoring and, especially, knowledge about entrepreneurship were recurring items cited by informants. Thus, it is consistent with what the pre-incubator proposes to do, and is also in line with the elements cited by Voisey, Jones and Thomas (2013) as pre-incubator services, which are: business plan assistance ; practical guidance; mentoring; training (workshops, seminars, lectures); financial advice; networking.

#### ***4.7 negative points and possible improvements***

The main negative point highlighted by the informants was the change of management of the pre-incubator that disturbed the participants, as demonstrated by their lines:

“We spent a long time without any activity due to the change of personnel, changed all the staff, so it was a month even though it was without, then there was a month that had a lecture every day, [...] so the change of management disturbed, in our case it disturbed”(Informant 2).

“It was two months that were lost, from 6 to 4 months is more difficult” (Informant 3).

"He changed the team, everyone came out came another, was a vacuum and I think it hurt a lot and people have lost a lot, people scattered and we ended up being harmed because they did not have enough class, sometimes I could have had more talk, one thing, then another "(Informant 6).

On the other hand, the informant 4 says understanding this process due to the recent creation of the

pre-incubator. Similarly, the informant five mentioned that it like a new team added. Finally, the informant 7 stressed that it did not affected. This difference of opinion can be justified due to pre-incubation group was not the same for all respondents. Therefore, some informants have suffered most from the switch management. As learning is a suggestion that is avoided the exchange of pre-incubator management in the process.

Other feedback signaled the need for a more specific or specialized support on the business of each. For example, greater assistance in programming, mentors with higher affinity and experience in mentoring the area, as well as greater support for hardware. In short, follows the speech of the informant 5.

"At the time of offering this space it is interesting to think how each company will work [...] be more specific services, select the requirements that each has [...] several companies will have different needs."

In addition, lack of real co-creation between the teams; lack of feedback on the selection process and, earlier onset of mentoring were mentioned elements. As a suggestion, an informant mentioned that the methodology applied in the pre-incubator presented should be soon at the beginning of the process so that all participants are aware of the way to go. "The issue of methodology of forming the right dates, what would happen at each step, it would have been better if it had happened" (Informant 5). As well, most of pre-incubator aid in the transition out of pre-incubation and take the next step.

## **5. Conclusion**

This research aimed to analyze the pre-incubation process through the experience of pre-incubates in a pre-incubator in Florianópolis, SC. Thus, informants reported how the pre-incubator helped them in the business, the benefits, improvements and impressions. As a first statement, demonstrated from the information collected that the pre-incubator has performed the services it has promised. Thus, it provided infrastructure, mentoring, training, workshops (therefore, knowledge about entrepreneurship) and the like, which enabled the connection of cocreators with each other and with the market, and assisted them in validating their respective business models.

As shown, the best environment for testing and validating the business model is the pre-incubator. All informants reported that it assisted in building their business models. Thus, the pre-incubator fulfilled its objective. At the end of the process, of the seven participants interviewed, only two did not continue their business. It is important to note, however, that the success of the pre-incubator depends not only on those monetized businesses, but also on those ideas that validated have not been, as this is an ongoing process.

Thus, the habitat perceived was as a space for much learning about entrepreneurship, networking and business. In addition, it represented an environment of connection between people and market. The pre-incubator also seen was as an alternative to the incubator for the initial ideation and validation phase. In fact, the pre-incubator is the first step in the entrepreneurial world that can bring sustainability and accuracy to the business. In addition, it can serve as a positive factor for entrepreneurial intentions (MARTÍNEZ; FERNÁNDEZ-LAVIADA; CRESPO, 2017).

The negative points highlighted by the cocriators were mainly the change of management in the middle of the pre-incubation process and the need for more specialized people to guide each business in a more personalized way. In turn, the mentoring process was a debatable item, perceived as positive for some and

negative for others. Some cocreators also missed greater co-creation among the class.

In this research, it noticed was that there are few studies on pre-incubation in the general literature. Therefore, it is clear the relevance of this study, by deepening questions regarding the pre-incubation process through the perception of people who lived this experience. Finally, it is worth noting that this is a case study and, therefore, the conclusions presented here concern the specific pre-incubator of this study, and generalized cannot be. Given the lack of literature on this important habitat and the need for more results to compare the performance of pre-incubators, it suggested to conduct studies like this in other pre-incubators. In addition, a longitudinal study in the pre-incubator of this study would be important as a way of analyzing its evolution.

## 6. References

ALMEIDA, A.; DA SILVA, B.; ROCK, C. The Influence of Technology Parks in Strokes TI Area and the Economic Development. **Scientific Journal Online-Technology, Management and Humanism**, vol. 2, no. 1, 2013.

BARR, P. S. **Current and potential importance of qualitative methods in strategy research**. Research Methodology in Strategy and Management, eds. D. Ketchen and D. Bergh. 2004.

BIRTH, D. S.; LABIAK JUNIOR, S. **Environments and dynamic cooperation for innovation**. Aymara: Curitiba, 2011.

BONI V.; LENT, S. Learning to interview: how to make interviews in Social Sciences. **Electronic Journal of Post-Graduates in Political Sociology at UFSC**, v. 2, n.1, pp. 68-80, Jan. 2005.

BORBA, F. **Dictionary of Contemporary Portuguese**. São Paulo: Editora UNESP, 2004. 1.470p.

BRUNET, M. Presentation in the section on pre-incubation. In: ASSOCIATION OF NATIONAL ORGANIZATIONS WORKSHOP PROMOTING THE INNOVATIVE DEVELOPMENTS, 11, 2003 Brasilia. **Anais...** ANPROTEC: Brasília, 2003.

CHAN, K; LAU, T. Assessing technology incubator programs in the science park: the good, the bad and the ugly. **Technovation**, v. 25, no. 10, p. 1215-1228, 2005.

COCREATION LAB. **Centro Sapiens**, 2019. Available at: <https://centrosapiens.com.br/cocreationlab/>. Accessed on 23 jan 2020.

DEMO, P. **Scientific methodology in social sciences**. 3. ed. rev. and current. São Paulo, SP: Atlas, 1995.  
EXAME. **Cenário aquecido e infraestrutura especializada atraem empresas de tecnologia para Florianópolis**. 2018. Available at: <https://exame.abril.com.br/negocios/dino/cenario-aquecido-e-infraestrutura-especializada-atraem-empresas-de-tecnologia-para-florianopolis/>. Access: 20 November

2019.

FALLGATTER, M. G.; SENA, A. Role of Pre-Business Incubators on Entrepreneurship Development: The Case of Gene-Blumenau. In: Brazilian Congress Of University Extension, 2, 2004, Belo Horizonte, MG. **Anais ...** Belo Horizonte, 2004.

FERREIRA, M.; TEIXEIRA, C. S. **Pre-incubator: conceptual alignment**. São Paulo: Perse, 2017. 21p.

GIL, A. C. **Methods and techniques of social research**. 6. ed. São Paulo: Atlas SA, 2008. 220 p.

HABITAT SANTA CATARINA INNOVATION. (2018). Available at: <<http://via.ufsc.br/mapas-da-via>>. access: 21 Oct.. 2019.

JUNIOR, S. L.; MACEDO, M.; TRINITY, E. P. **Innovative Entrepreneurship habitats**. p. 03. In book: Knowledge Transfer between incubators, University and Society, Edition: 1, 2005, 36p.

KLOFSTEN M.; LINDHOLM D. Å. **Growth and innovation support in Swedish science parks and incubators**. 2002.

KUEHN, K. W. Entrepreneurial intentions research: Implications for entrepreneurship education. **Journal of Entrepreneurship Education**, Vol. 11, p. 87, 2008.

LAKATOS, E. M. **Fundamentals of scientific methodology**, 7th ed. São Paulo: Atlas, 2010.

LYONS, T. S.; LI S.; ZHAO, B. The state of the Wisconsin incubation industry in 2002: an analysis of the results of the survey of membership. **Report prepared for The Wisconsin Business Incubator Association**, 2003.

MARTÍNEZ, K. R. G.; FERNÁNDEZ-LAVIADA, A.; CRESPO, Á. H. Influence of business incubators performance on entrepreneurial intentions and its antecedents during the pre-incubation stage. **Entrepreneurship Research Journal**, v. 8, n. 2, 2017.

NDONZUAU, Frédéric Nlemvo; PIRNAY, Fabrice; SURLEMONT, Bernard. A stage model of academic spin-off creation. **Technovation**, v. 22, n. 5, p. 281-289, 2002.

NINTEC, **Technological Innovation**, 2012. Incubator companies. Available at: <<http://prp.ufla.br/index.php>>. Access: 17 October 2019.

PALLOTTA, V.; CAMPISI, D. Starmac: An environment for the stimulation and development of entrepreneurial projects in academic Institutions. **Industry and Higher Education**, Vol. 32, no. 4, p. 269-280, 2018.

PRODANOV, C. C.; FREITAS, E. C. **Methodology of Scientific Work: Methods and Techniques of Research and Academic Work**. 2. ed. Novo Hamburgo: Feevale, 2013.

RASMUSSEN, E. A.; SORHEIM, R. Action-based entrepreneurship education. **Technovation**, v. 26, n. 2, p. 185-194, 2006.

SANTOS, J A. Proposed Program for Pre-Incubation and Business Incubation in Rio das Ostras Operational Unit of the UFF incubators Network. In: EXCELLENCE SYMPOSIUM ON MANAGEMENT AND TECHNOLOGY, 9, Rio de Janeiro, Rio de Janeiro. **Anais ...** Rio de Janeiro, 2012.

SEBRAE. **How to prepare a business plan**. 2018. Available at: <<http://www.sebrae.com.br/sites/PortalSebrae/artigos/como-elaborar-um-plano-de-negocio,37d2438af1c92410VgnVCM100000b272010aRCRD>>. Access: 10 November 2019.

TEIXEIRA, C. S, et al. **Habitat de Inovação: Alinhamento Conceitual**. Perse: Florianópolis, 2016, 10p.

USINE. **University of International Startup Entrepreneurs**. 2002. Available at: <http://www.usine.unibonn.de/Downloads/bilder/preincubation.pdf>. Accessed on 19 Jun. 2018.

VALDEZ ALVARADO, A. Models negocio en la Nube. **Información magazine, Technology and Society**, p. 1, 2012.

VIA ESTAÇÃO CONHECIMENTO. **Mapas da VIA – habitats de inovação**. 2019. Available at: <http://via.ufsc.br/mapas-da-via/>. Access: 23 jul. 2019.

VOISEY, P.; JONES, P.; THOMAS, B. The pre-incubator: a longitudinal study of 10 years of university pre-incubation in Wales. **Industry and higher education**, v. 27, no. 5, p. 349-363, 2013.

WELL MACHADO, A.; DA SILVA, R.; CATAPAN, A. Bibliometrics on design innovation habitats. **Navus-Journal of Management and Technology**, vol. 6, no. 3, p. 88-96, 2016.

WILSON, P. **Fostering entrepreneurship and innovation through business incubators: a comparative analysis of the role of European Business and Innovation centers**. 2008. Doctoral Thesis. Newcastle University.